

Appl. No. 09/922,059

Attorney Docket No. 10541-562

II. Listing of Claims

1. (Original): A method of high volume production of a low permeation plastic container, the method comprising:

a) progressively heating a plurality of thermoplastic sheets to a first temperature;

b) removing a group of thermoplastic sheets from the plurality of thermoplastic sheets;

c) heating the group of thermoplastic sheets to a second temperature; and

d) forming the group of thermoplastic sheets into a container.

2. (Original): The method of claim 1, wherein a) comprises positioning the thermoplastic sheets in a convection oven.

3. (Original): The method of claim 1, wherein b) comprises selecting the group of thermoplastic sheets that have reached the first temperature.

4. (Original): The method of claim 1, wherein b) comprises progressively heating additional thermoplastic sheets to replace the group of thermoplastic sheets removed.

5. (Original): The method of claim 1, wherein c) comprises simultaneously heating each thermoplastic sheet in the group of thermoplastic sheets with an infrared heater.

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6. (Original): The method of claim 1, wherein d) comprises coupling an object with at least one thermoplastic sheet in the group of thermoplastic sheets such that the object is positioned within the plastic container.

7. (Original): The method of claim 1, wherein d) comprises simultaneously vacuum-forming each thermoplastic sheet in the group of thermoplastic sheets to a surface of a mold.

8. (Original): The method of claim 1, wherein d) comprises fusing a lip formed with the group of thermoplastic sheets to form the container.

9. (Original): The method of claim 1, wherein a), b) and c) are occurring in parallel along a first processing path and a second processing path.

10. (Original): The method of claim 1, wherein d) is occurring along a common processing path.

11. (Original): A method for high volume production of a low permeation plastic fuel tank, the method comprising:

a) progressively raising the temperature of a plurality of thermoplastic sheets to a pre-processing temperature within a pre-conditioning stage;

b) indexing at least two, but less than all, of the thermoplastic sheets to a final heat stage;

c) further increasing the temperature of the at least two thermoplastic sheets to a processing temperature;

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- d) indexing the at least two thermoplastic sheets to a forming stage;
- e) urging each of the at least two thermoplastic sheets into contact with a mold; and
- f) fusing the at least two thermoplastic sheets to form a plastic fuel tank.

12. (Original): The method of claim 11, wherein the mold comprises a bottom mold piece and a top mold piece, and e) comprises urging one of the at least two thermoplastic sheets into contact with the bottom mold piece and urging another of the at least two thermoplastic sheets into contact with the top mold piece.

13. (Original): The method of claim 11, wherein a) comprises indexing additional thermoplastic sheets into the pre-conditioning stage to replace the at least two thermoplastic sheets.

14. (Original): The method of claim 11, wherein a) comprises minimizing variability in the temperature of each of the thermoplastic sheets.

15. (Original): The method of claim 11, wherein a) comprises maintaining the thermoplastic sheets at the pre-processing temperature.

16. (Original): The method of claim 11, wherein d) comprises simultaneously indexing the at least two thermoplastic sheets to the forming stage.

17. (Original): The method of claim 11, wherein f) comprises injecting high-pressure fluid into the mold to pack out the at least two thermoplastic sheets.

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18. (Original): The method of claim 11, wherein e) comprises coupling a fuel system component with at least one of the at least two thermoplastic sheets such that the fuel system component is positioned within the plastic fuel tank.

19. (Original): The method of claim 11, wherein the length of time to raise the thermoplastic sheets to the pre-processing temperature is longer than the length of time to raise the at least two thermoplastic sheets to the processing temperature.

20. (Original): The method of claim 11, wherein a) comprises heating in a predetermined pattern to uniformly raise the temperature of each of the thermoplastic sheets.

21 - 34. (Cancelled)

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